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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,336	06/22/2001	Robert E. Dvorak	BLFR 1004-1	7227

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EXAMINER

VAN DOREN, BETH

ART UNIT	PAPER NUMBER
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3623

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/888,336

Applicant(s)

DVORAK ET AL.

Examiner

Beth Van Doren

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-41, 51 and 53-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 36-41, 51 and 53-63 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. The following is a Final office action in response to communications received 1/10/2007. Claims 51 and 56-57 have been amended. Claim 42 has been canceled. Claims 36-41, 43-51, and 53-63 are now pending.

Response to Amendment

2. Applicant's amendments to the abstract and title are sufficient to overcome the specification objections set forth in the previous office action.
3. Applicant's newly submitted drawing is sufficient to overcome the drawing objections set forth in the previous office action.
4. Applicant's cancellation of claim 42 and amendments to claims 56-57 are sufficient to overcome the claim objections set forth in the previous office action.

Response to Arguments

5. Applicant's arguments with regards to Landvater (U.S. 6,609,101) in view of Dulaney et al. (U.S. 6,341,269) have been fully considered, but they are not persuasive. In the remarks, applicant argues that (1) Landvater considers financial analytics as an after thought and thus, the examiner is not considering the invention as a whole or the reference as a whole, (2) the teaching of Landvater concerning financial analysis are not provided in a way that has a written description or an enabling disclosure, (3) Landvater does not teach or suggest the detail of setting inventory budgets for groups of items, (4) Landvater does not teach or suggest prorating inventory budgets among items, (5) Landvater does not teach or suggest comparing inventory budgets to simulated future inventory, (6) Dulaney et al. does not teach or suggest inventory management, problems constrained by budget, or inventory dollar budgets, (7) there is no

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motivation to combine Landvater and Dulaney, (8) as per claims 45-50, neither reference teaches the reporting required, and (9) as per claim 53, Landvater does not teach or suggest correction of future sales levels for stockouts and Dulaney et al. teaches an unrelated concept to generating an accurate simulation.

In response to argument (1), Examiner respectfully disagrees. In figure 2, Landvater shows the overall system of his invention, where the financial planning system is clearly interconnected. Further, Landvater includes a section in column 20 clearly directed towards this system. Therefore, Landvater specifically chose to include discussion concerning the budgets in relation to the projections of his system. Further, Examiner has read the claim as a whole, and considered the prior art as a whole. The prior art specifically deals with all different aspects concerning inventory replenishment, management, and financing.

In response to argument (2), Examiner respectfully disagrees. First, Landvater's disclosure is enabling because it is described in a way that makes it possible for one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, the terms cash flows, projections, and budgets have specific meanings in the art. Further, Landvater specifically outline how the projection calculations are related to budgets and financial planning. Further, Landvater's specification is described in such a way that reasonably conveys to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In response to argument (3), Examiner respectfully disagrees. In column 20, lines 29-47, Landvater discloses the Financial Planning System of the overall system (see also figure 2). This section discloses various budgets being compared to projections of the organization. The

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projections involve projected sales forecasts concerning groups of items held in inventory at the store and maintained through replenishment. Examiner points out that claim 36 does not include the detail of setting inventory budgets, just that this act occurs.

In response to argument (4), Examiner respectfully disagrees. In column 20, lines 29-47, Landvater explains how he looks at inventory budgets in terms of projections (such as sales and inventory needs and costs), and then determines the costs and financials specific to the set of products being examined. Specifically, the financial system projects costs of the products in inventory and uses cash flow planning to calculate a projected inventory. Thus the budgets and financials constrain the inventory of the future.

In response to argument (5) that the references fail to show certain features of applicant's invention, it is noted that the feature upon which applicant relies (i.e., comparing inventory budgets to simulated future inventory) is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to argument (6), Examiner respectfully disagrees. See at least the abstract of Dulaney et al., which discloses the systems specific use with inventory management. Examiner notes that Dulaney et al. was specifically relied upon to teach, in the field of inventory management, reporting financial values associated with this inventory. Dulaney et al. does so in column 4, lines 1-5 and 40-50, column 15, lines 35-55.

In response to argument (7) that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching,

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suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Dulaney et al. and Landvater are in an analogous art and are systems that manage inventory at the retail and distributor level, wherein inventory is optimized based on considerations like cost, expected sales, etc. See column 20, lines 35-48, of Landvater, which discloses the motivation of increase the use of the data in cash planning for the company.

In response to argument (8), Examiner respectfully disagrees.

With regards to claims 45 and 46, only Landvater was relied upon to teach the reporting feature. See column 11, lines 25-50, wherein the user is told that the forecast for the product exceeds a forecast threshold. This forecast is based on a model of the system, which makes projections about inventory demands. Thus, the user is informed when the situation occurs.

As per claim 47-50, Examiner stated that neither Landvater nor Dulaney et al. expressly disclose reporting values of these purchase orders or reporting values that exceed minimum order quantities. However, as discussed in the arguments above, both Landvater and Dulaney et al. do include some reporting functionality, just not for this intended purpose. Therefore, since Dulaney et al. and Landvater are analogous art and are systems that manage inventory at the retail and distributor level, wherein inventory is optimized based on considerations like cost, expected sales, etc. and since they both have reporting functionality, it would have been obvious to one of ordinary skill in the art at the time of the invention to include reporting the specific values discussed in claims 47-50, as set forth below.

In response to argument (9), Examiner first points out that she did not rely on Landvater to teach correction of future sales levels for stockouts. Rather, she relied upon Landvater to disclose correcting sales levels for increased sales due to increased demand for a time period at respective selling locations associated with the items. See column 4, lines 17-30, column 5, lines 1-15 and 35-47, column 11, lines 10-25, column 18, lines 1-5, of Landvater, where sales forecasts are corrected for holidays, promotions, and other events where sales are determined to be increased. The user is allowed to override a sales forecast.

Examiner then relied on Dulaney et al. to disclose the concept of stockouts. See Dulaney, abstract, column 5, lines 43-57, and column 6, lines 50-65, which discloses sales variability and the impact of stockouts, which occur when there is not enough inventory of the product. Therefore, Dulaney et al. (in this instance) was not relied upon to teaches concepts related to generating an accurate simulation. Therefore, since both Dulaney et al. and Landvater are systems that manage inventory at the retail and distributor level, wherein inventory is optimized based on considerations like cost, expected sales, etc. and Landvater specifically discloses adjusting planned deliveries for high sales items and periods (such as promotions, holidays, display changes, etc.) so as to ensure that enough products are in stock, Examiner maintains that it would have been obvious to one of ordinary skill in the art at the time of the invention to include stockout considerations in the planning of Landvater, as set forth below.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 36-41, 43-51, and 53-63 rejected under 35 U.S.C. 103(a) as being unpatentable over Landvater (U.S. 6,609,101) in view of Dulaney et al. (U.S. 6,341,269).

As per claim 36, Landvater teaches a method of prorating inventory budgets among items, including:

setting inventory budgets for groups of items (See column 20, lines 29-47, which discusses budgets for inventory and replenishment shipments);

projecting future demand for the items (See column 4, lines 25-37, column 5, lines 1-15, column 8, lines 14-25, wherein future sales/need for items are performed);

setting notional deliveries for the items, utilizing the projected future demand unconstrained by the inventory budgets (i.e. estimated) (See column 8, lines 25-45, column 15, line 30-column 14, lines 20, wherein planned replenishment shipments are set using the projected future sales as input into the replenishment system);

simulating future inventory for the items, utilizing current inventory, the projected future demand, firm future deliveries and the notional deliveries (See column 5, lines 10-30, column 8, lines 15-40, column 14, lines 3-30, wherein future inventory is projected using current inventory, projected future sales, planned deliveries and deliveries that are set to occur);

prorating the inventory budgets among the items, for a plurality of predetermined time periods (See column 20, lines 29-47, wherein the financials of future shipments/inventory is considered, divided proportionally amongst the products); and

calculating open to buy values that compare the prorated inventory budgets for the items or aggregations of the items to the simulated future inventory for the items or aggregations of the items (See column 20, lines 29-47, wherein the budgets are compared to the future inventory to determine projected inventory investment, useful for cash planning).

However, Landvater does not expressly disclose reporting these values.

Dulaney et al. discloses reporting values associated with financials of the system (See figures 1A, 1B, and 5, column 4, lines 1-5 and 40-50, column 15, lines 35-55).

Both Dulaney et al. and Landvater are systems that manage inventory at the retail and distributor level, wherein inventory is optimized based on considerations like cost, expected sales, etc. It would have been obvious to one of ordinary skill in the art at the time of the invention to output the budget related values to a user in order to increase the use of the data in cash planning for the company. See column 20, lines 35-48, of Landvater.

As per claim 37, Landvater teaches calculating corrected deliveries for increased sales due to increased demand for a time period at respective selling locations associated with the items (See column 4, lines 17-30, column 5, lines 1-15 and 35-47, column 11, lines 10-25, column 18, lines 1-5, wherein sales forecasts are corrected for holidays, promotions, and other events where sales are determined to be increased. The user is allowed to override a sales forecast). Landvater also discloses corrected deliveries for lower sales frequency items (See column 10, lines 30-45 and 55-67, column 11, lines 30-50). These delivery plans are calculated and consistent with prorated open to buy inventory budgets (See column 20, lines 29-47, wherein the budgets are compared to the future inventory to determine projected inventory investment, useful for cash planning).

However, Landvater does not expressly disclose calculating lost sales for the items based on the reduced notional deliveries.

Dulaney et al. discloses calculating lost sales for the items based on the reduced deliveries (See abstract, column 5, lines 43-57, and column 6, lines 50-65).

Both Dulaney et al. and Landvater are systems that manage inventory at the retail and distributor level, wherein inventory is optimized based on considerations like cost, expected sales, etc. Landvater specifically discloses adjusting planned deliveries for high sales items and periods (such as promotions, holidays, display changes, etc.) as well as reducing planned deliveries for low sales items (such as hot sauce and other not frequently purchased items). Landvater specifically forecasts to increase deliveries during holidays, promotions, etc. to ensure that enough products are in stock. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include stockout considerations (i.e. when enough products are not in stock) in order to increase the accuracy of the financial planning system of Landvater by ensuring that all data important to budgeting are considered, thus making the data for cash planning useful. See column 20, lines 35-48, of Landvater, and column 5, lines 43-57, and column 6, lines 50-65 of Dulaney et al.

As per claims 38 and 39, Landvater wherein the notional delivery levels are constrained by lead time for ordering and obtaining delivery of the items (See column 8, lines 25-40, and column 17, line 58-column 18, line 3, wherein lead time is a consideration in replenishment).

As per claim 40, Landvater discloses wherein the projected future demand for the items are projected on a daily or more frequent basis (See column 10, lines 20-30, wherein the future demand is stored on a daily basis).

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As per claim 41, Landvater discloses wherein the simulated future sales for the items are simulated on a daily or more frequent basis (See column 10, lines 20-30, wherein the future demand is stored on a daily basis).

As per claims 43 and 44, Landvater wherein the notional delivery levels are based in part on optimal stocking levels (See column 4, lines 25-40, column 8, lines 20-40, column 14, lines 1-30, wherein optimal numbers, such as safety stock, days of supply, etc., are considered in the delivery plan).

As per claims 45 and 46, Landvater discloses reporting the simulated future inventory levels that exceed the optimal stocking levels (See column 11, lines 25-50, wherein the user is told that the forecast for the product exceeds a forecast threshold).

As per claims 47-50, Landvater discloses reporting the simulated future inventory levels that exceed the optimal stocking levels (See column 11, lines 25-50, wherein the user is told that the forecast for the product exceeds a forecast threshold). Landvater further discloses placing purchase orders with suppliers that have been set for a date, but have not yet been fulfilled (See column 13, lines 30-50 and 60-67, column 14, lines 1-22, wherein a date is set for a shipment, but it has not yet reached the purchaser). Further, Landvater discloses wherein the notional delivery levels are consistent with minimum order quantities for the items (See column 8, lines 22-40, column 15, lines 25-40, column 16, lines 13-36, wherein group products and typical shipping quantities are considered).

However, neither Landvater nor Dulaney et al. expressly disclose reporting values of these purchase orders or reporting values that exceed minimum order quantities.

Both Dulaney et al. and Landvater are systems that manage inventory at the retail and distributor level, wherein inventory is optimized based on considerations like cost, expected sales, etc. It would have been obvious to one of ordinary skill in the art at the time of the invention to report values associated with purchase orders, such as the number of items ordered, in order to more accurately forecast for replenishment by including the values already ordered in the on-hand inventory. See column 5, lines 17-30, and column 14, lines 3-20, of Landvater that discusses this process.

As per claim 51, Landvater teaches wherein the projected future demand levels are based in part on desired in stock service levels (See column 14, lines 3-33 and line 65-column 15, line 6, wherein safety stock is considered).

As per claim 53, Landvater discloses wherein the sales levels are corrected for increased sales due to increased demand for a time period at respective selling locations associated with the items (See column 4, lines 17-30, column 5, lines 1-15 and 35-47, column 11, lines 10-25, column 18, lines 1-5, wherein sales forecasts are corrected for holidays, promotions, and other events where sales are determined to be increased. The user is allowed to override a sales forecast).

However, Landvater does not expressly disclose stockouts.

Dulaney et al. discloses calculating lost sales for the items based on the reduced deliveries (See abstract, column 5, lines 43-57, and column 6, lines 50-65).

Both Dulaney et al. and Landvater are systems that manage inventory at the retail and distributor level, wherein inventory is optimized based on considerations like cost, expected sales, etc. Landvater specifically discloses adjusting planned deliveries for high sales items and

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periods (such as promotions, holidays, display changes, etc.) as well as reducing planned deliveries for low sales items (such as hot sauce and other not frequently purchased items).

Landvater specifically forecasts to increase deliveries during holidays, promotions, etc. to ensure that enough products are in stock. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include stockout considerations (i.e. when enough products are not in stock) in order to increase the accuracy of the financial planning system of Landvater by ensuring that all data important to budgeting are considered, thus making the data for cash planning useful. See column 20, lines 35-48 of Landvater, and column 5, lines 43-57, and column 6, lines 50-65 of Dulaney et al.

As per claims 54 and 55, Landvater discloses wherein the notional delivery levels are consistent with presentation quantities for the items at respective selling locations associated with the items (See column 14, lines 3-33 and line 65-column 15, line 6 and lines 15-25, wherein safety stock and delivery quantities are in line with presentations (shelf displays) at stores).

As per claim 56 and 57, Landvater discloses wherein the notional delivery levels are determined with reference to a causal calendar of events (See column 13, line 30-40, line 60-column 14, line 26, and column 17, lines 5-20, 30-40, and 57-67, wherein deliveries are based on a calendar of events, such as promotional dates and display changes, which are known in the system).

As per claim 58 and 59, Landvater discloses wherein the notional delivery levels take into account planned promotions (See column 5, lines 30-50, and column 17, lines 5-20, 30-45, and 58-67, and column 18, lines 1-25, wherein promotions are considered).

As per claim 60 and 61, Landvater discloses wherein the notional delivery levels are consistent

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with minimum order quantities for the items (See column 8, lines 22-40, column 15, lines 25-40, column 16, lines 13-36, wherein group products and typical shipping quantities are considered). As per claim 62, Landvater teaches wherein the prorating is based on the simulated future sales (See column 20, lines 29-47, wherein the financials of future shipments/inventory is considered, divided proportionally amongst the products, based on the forecasts of the system).

As per claim 63, Landvater discloses wherein the simulated future sales levels are corrected for increased sales due to increased demand for a time period at respective selling locations associated with the items (See column 4, lines 17-30, column 5, lines 1-15 and 35-47, column 11, lines 10-25, column 18, lines 1-5, wherein sales forecasts are corrected for holidays, promotions, and other events where sales are determined to be increased. The user is allowed to override a sales forecast).

However, Landvater does not expressly disclose stockouts.

Dulaney et al. discloses simulating lost sales for the items based on the reduced deliveries and the Costs associated with these lost sales (See abstract, column 5, lines 43-57, and column 6, lines 50-65).

Both Dulaney et al. and Landvater are systems that manage inventory at the retail and distributor level, wherein inventory is optimized based on considerations like cost, expected sales, etc. Landvater specifically discloses adjusting piked deliveries for high sales items and periods (such as promotions, holidays, display changes, etc.) as well as reducing planned deliveries for low sales items (such as hot sauce and other not frequently purchased items). Landvater specifically forecasts to increase deliveries during holidays, promotions, etc. to ensure that enough products are in stock. Therefore, it would have been obvious to one of ordinary skill

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in the art at the time of the invention to include stockout considerations (i.e. when enough products are not in stock) in order to increase the accuracy of the financial planning system of Landvater by ensuring that all data important to budgeting are considered, thus making the data for cash planning useful. See column 20, lines 35-48 of Landvater, and column 5, lines 43-57, and column 6, lines 50-65 of Dulaney et al.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ettl et al. (U.S. 6,078,900) discloses inventory budgets and constraints and inventory budgets being allocated to products.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beth Van Doren whose telephone number is 571-272-6737. The examiner can normally be reached on M-F, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

bvd

bvd

March 29, 2007

Beth Van Doren
AU 3623
Patent Examiner